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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,646	08/21/2003	Quentin J. Clark	MSFT-2734/305604.01	9792

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EXAMINER

CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
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2162

MAIL DATE	DELIVERY MODE
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07/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/646,646

Applicant(s)

CLARK ET AL.

Examiner

Jean M. Corrielus

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on May 7, 2007, in which claims 2 and 4-14 are presented for further examination.

Response to Arguments

2. Applicant's arguments filed May 7, 2007 have been fully considered but they are not persuasive. (See Examiner's remark).

Claim Objections

3. Claim 1 is objected to because of the following informalities: the language of the claim "wherein the data store implements a data model that supports the organization, searching, sharing, synchronization, and security of data stored in the data store and wherein specific types of data are described in schemas, wherein the storage platform provides a mechanism to extend the schemas to define a new type of data" does not make sense. The organization was not mentioned previously. Amendment is advised.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2162

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2 and 4-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Frenkel
US Patent no. 7,099,932

As to claim 2, Frenkel discloses “a database engine” (machine engine 310 is coupled to a communication engine 312, wherein the communication engine 312 is configured to formulate and exchange messages with the policy server; see col.5, lines 35-40); “a data store implemented on the database engine for storing data therein, wherein the data store implements data model, supports organization, searching, sharing, synchronization, and security of data stored in the data store and wherein specific types of data are described in schemas, wherein the storage platform provides a mechanism to extend the schemas to define a new type of data” (updating the data store of the directory server, wherein a directory server that communicates to other applications using LDAP, in a way that keeps the data store consistent with any other external data store., so application 608 extends the Schema by adding application-specific parameters to it, wherein the extended Schema describes the application and its specific parameters, see col.6, lines 25-31); “an application programming interface that enables application programs to access all of the services and capabilities of the storage platform and to access the data described in the schemas” (the application-specific parameters are added dynamically using LDAP; see col.6, lines 34-40); and “a set of schemas that define different types of items, elements, and relationships, wherein the application programming interface comprises a class for each of the different type of items, elements, and relationships defined in the set of schemas, and is configured to track changes to the data made by the application programs and to register specific application programs for notifications that indicate changes to specific data (Using the object identifier values, the schema can track the

Art Unit: 2162

change and the location of any object under a logical parent; and the directory service is defined by a schema, which identifies classes and their attributes that may be used by a policy management system for communicating with a directory and obtaining information from it, accordingly an information model and schema are provided to define such object classes, in an object-oriented programming language, and also certain logical relationships between directory objects and the policy information tree; col.6, lines 24-31), “wherein the storage platform supports interoperability with existing file systems, enables users and systems to synchronize data stored in different instances of the data store, and provides the ability for application programs to be notified about and to track changes made to the data in the data store, wherein data in the data store is defined in terms of items, elements, and relationships, wherein each item is a unit of data storable in the data store and comprises one or more elements, an element is an instance of a type comprising one or more fields, and a relationship is a link between at least two items” (Using the object identifier values, the schema can track the location of any object under a logical parent).

As to claim 4, Frenkel discloses “wherein data also stores in the data store in the form of an extension to an existing item type, and wherein the application programming interface comprises a class for each different item extension” (Schema stored in the Repository provides an integration point and a common information model for communication between Application 608 and Policy Server 604, wherein the application 608 extends the Schema by adding application-specific parameters to it and the extended Schema describes the application and its specific parameters).

As to claim 5, Frenkel discloses “wherein the class for each type of item, element, and relationship is generated automatically based on the set of schemas that define each type of item, element, and relationship” (the LDAP schema generally consists of a description of object classes and their attributes that are available to instantiated objects or entries in the directory service, so the information model and schema that are described in this document define both classes and logical relationships between directory objects and a policy information tree that is represented in the directory; col.4, lines 10-15).

As to claim 6, Frenkel discloses “wherein the classes for each type of item, element, and relationship define a set of data classes, and wherein the application programming interface further comprises a second set of classes that define a common set of behaviors for the data classes” (the LDAP schema generally consists of a description of object classes and their attributes that are available to instantiated objects or entries in the directory service, so the information model and schema that are described in this document define both classes and logical relationships between directory objects and a policy information tree that is represented in the directory; col.4, lines 10-15).

As to claim 7, Frenkel discloses “wherein the second set of classes comprise a first class that represents a storage platform scope and that provides the context for queries on the data store and a second class the represents the results of a query on the data store (for every policy deployment

Art Unit: 2162

operation results in the creation of a new DIT, which is fully written back into the directory server, thereby duplicating unchanged objects; col.8, lines 40-45).

As to claim 8, Frenkel discloses wherein the different types of items, elements, and relationships in the data store are implemented in the database engine as user-defined types (UDT)” (by updating the data store of a directory server, in a way that keeps the data store consistent with any other external data store; col.2, lines 53-57).

As to claim 9, Frenkel discloses “wherein the application programming interface provides a query model that enables application programmers to form queries based on various properties of the items in the data store, in a manner that insulates the application programmer from the details of the query language of the database engine” (quality of service management information model, in the form of a directory schema, is provided in order to enforce data concurrency and other desirable behavior; col.4, lines 1-5).

As to claim 10, Frenkel discloses “wherein a plurality of items in the data store may comprise an Item Folder and at least one other item that is a member of the Item Folder” col.2, lines 53-57.

As to claim 11, Frenkel discloses “wherein a plurality of items in the data store may comprise a Category and at least one other item that is a member of said Category” (a system in which it is

Art Unit: 2162

desirable to retrieve information about a group of users from a directory server, but the system needs to provide information about all the users or none at all. This rule might be enforced to ensure, e.g., because if group members or group attributes are in the process of being edited, delivery of group information should be delayed until the editing is complete).

As to claim 12, Frenkel discloses “wherein said relationship between two items is established automatically by a hardware or software interface system” (related to the use of computer system for retrieving and storing quality of service policy management information using a directory service; col.13, lines 28-37).

As to claim 13, Frenkel discloses “wherein said element is understandable by a hardware or software interface system” (related to the use of computer system for retrieving and storing quality of service policy management information using a directory service; col.13, lines 28-37).

As to claim 14, Frenkel discloses “wherein said relationship comprises an element” (element 609 is one or more software programs, processes, or modules that can be linked to application 608 and called by the application) col.7, lines 23-26).

As to claim 15, Frenkel discloses “wherein said set of schemas comprises a Core Schema that defines a set of Core Items by which the storage platform understands and directly processes said set of Core Items in a predetermined” (the LDAP schema generally consists of a description of object classes and their attributes that are available to instantiated objects or entries in the

Art Unit: 2162

directory service, so the information model and schema that are described in this document define both classes and logical relationships between directory objects and a policy information tree that is represented in the directory; col.4, lines 10-15).

As to claim 16, Frenkel discloses “wherein each type of item defined in the set of Core Items is derived from a single common base item” (Schema stored in the Repository provides an integration point and a common information model for communication between Application 608 and Policy Server 604; col.6, lines 60-66).

As to claim 17, Frenkel discloses “wherein said single common base item is a foundational item in a base schema” (Schema stored in the Repository provides an integration point and a common information model for communication between Application 608 and Policy Server 604; col.6, lines 60-66).

As to claim 18, Frenkel discloses “wherein said database engine comprises a relational database engine” (col.1, lines 45-46, relational database systems and object-oriented databases systems, e.g., SQL Server, Oracle, Sybase, etc.).

As to claim 19, Frenkel discloses “wherein said relational database engine comprises object relational extensions”(col.1, lines 45-46, relational database systems and object-oriented databases systems, e.g., SQL Server, Oracle, Sybase, etc.)

Remark

6. Applicant asserted that Frenkel fails to teach or suggest "an application programming interface that ... is configured to track changes to the data made by the application programs and to register specific application programs for notifications that indicate changes to specific data." The examiner disagrees with the precedent assertion. It is important to note that the limitation that the Applicant is relied upon is not disclosed either in the dependent or independent claims. There is no mentioned of configuring the application program interface to track changes to the data made by the application programs to register specific application programs for notifications that indicate changes to specific data. Even when the claims would have recited such limitation, the specification does not provide basis for that limitation. In fact, the specification stated that the change tracking mechanism implemented within the data store provides the ability to track changes to the data store, wherein the data store provides security capabilities and a promotion/demotion capability. The data store provides a set of application programming interfaces to expose the capabilities of the data store to other storage platform components and application programs (e.g., application programs 350a, 350b, and 350c) that utilize the storage platform. Therefore, the abovementioned assertion is moot.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

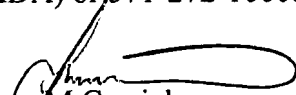
Art Unit: 2162

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean M Corrielus
Primary Examiner
Art Unit 2162

June 25, 2007